AMENDMENT UNDER 37 C.F.R. § 1.116 – EXPEDITED PROCEDURE   Page 2
Serial Number: 09/964,746   Dkt: 884.999US1 (INTEL)
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Title: METHOD AND STRUCTURE FOR IDENTIFYING LEAD-FREE SOLDER
Assignee: Intel Corporation

IN THE CLAIMS

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Please amend the claims as follows.

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1. (Original) A method comprising:

   placing a predetermined solder pattern onto a pad provided on a substrate; and

   heating said predetermined solder pattern, wherein a visual appearance of said

heated predetermined solder pattern being indicative of whether said solder is lead-free.

2. (Original) The method of claim 1, wherein said substrate comprises a printed circuit board.

3. (Original) The method of claim 1, wherein placing said predetermined solder pattern

comprises passing solder through at least one stencil aperture and onto said pad.

4. (Original) The method of claim 1, wherein said predetermined solder pattern comprises at

least one symbol.

5. (Original) The method of claim 1, wherein placing said predetermined solder pattern

comprises placing solder at one end of an indicator strip.

6. (Original) The method of claim 1, further comprising examining said heated predetermined

solder pattern to determine if said solder is lead-free.

7. (Original) The method of claim 6, wherein examining said heated predetermined solder

pattern comprises visually identifying whether said predetermined solder pattern after heating is

in substantially a same pattern as said predetermined solder pattern before heating.

8. (Original) The method of claim 6, wherein examining said heated predetermined solder

pattern comprises determining whether an amount of reflow is greater than a predetermined

amount.

9. (Currently Amended) A method comprising:

        providing a pad on a substrate;

        placing solder on said pad; and

        heating said solder so as to create reflow, a visual appearance of said heated

solder being indicative of whether said solder is lead-free based on the amount of reflow of said

solder on said pad.

10. (Original) The method of claim 9, wherein said substrate comprises a printed circuit board.

11. (Original) The method of claim 9, wherein placing said solder on said pad comprises

passing said solder through at least one stencil aperture and onto said pad.

12. (Original) The method of claim 11, wherein said solder is placed onto said pad in a

predetermined pattern.

13. (Original) The method of claim 12, wherein said predetermined pattern comprises at least one symbol.

14. (Original) The method of claim 9, further comprising identifying whether said solder is lead-free based on an amount of reflow of said heated solder.

15. (Original) The method of claim 14, wherein identifying whether said solder is lead-free comprises visually identifying whether said solder after reflow is in substantially the same predetermined pattern as before reflow.

16. (Original) The method of claim 14, wherein identifying said solder as lead-free comprises determining whether an amount of reflow is greater than a predetermined amount.

17. (Original) The method of claim 16, wherein said determining is based on a distance of reflow along said pad.

18. (Original) The method of claim 9, wherein placing said solder on said pad comprises placing solder at one end of an indicator strip.

19. (Original) A method of identifying whether a printed circuit board is lead-free, said method comprising:

receiving said printed circuit board having a heated solder pattern formed thereon; and

identifying whether solder on said printed circuit board is lead-free based on whether said

heated solder pattern is substantially similar to a predetermined solder pattern.

20. (Original) The method of claim 19, wherein said predetermined solder pattern comprises at

least one of a symbol and a character.

21. (Original) The method of claim 19, wherein said solder on said printed circuit board is

determined to be lead-free if said heated solder pattern is substantially similar to said

predetermined solder pattern.

22. (Original) The method of claim 19, wherein said solder on said printed circuit board is

determined to not be lead-free if said heated solder pattern substantially differs from said

predetermined solder pattern.

23. (Original) A method of identifying whether a printed circuit board is lead-free, said method

comprising:

      receiving said printed circuit board having a heated solder pattern formed thereon; and

      identifying whether solder on said printed circuit board is lead-free based on a distance

that said solder reflows.

24. (Original) The method of claim 23, wherein said identifying comprising comparing a

distance that said solder reflows with at least one indicator provided on said printed circuit board.

25.   (Original) The method of claim 24, wherein said solder on said printed circuit board is

determined to be lead-free if said solder has not reflowed further than said at least one indicator.

26.   (Original) The method of claim 24, wherein said solder on said printed circuit board is

determined to not be lead-free if said solder has reflowed further than said at least one indicator.

27-30.   (Canceled)

31.   (Previously Presented) The method of claim 6, wherein examining said heated

predetermined solder pattern comprises determining that said solder is lead-free if said

predetermined solder pattern after heating is in substantially a same pattern as said

predetermined solder pattern before heating.

32.   (Currently Amended) The method of ~~claim 9~~ claim 12, further comprising determining

that said solder is lead-free if said predetermined solder pattern after heating is in substantially a

same pattern as said predetermined solder pattern before heating.

33.   (Previously Presented) A method comprising:

           placing a predetermined solder pattern onto a pad on a substrate;

           heating said predetermined solder pattern; and

           determining that said solder is lead-free if said predetermined solder pattern after

heating is in substantially a same pattern as said predetermined solder pattern before heating.

34.   (Previously Presented) The method of claim 33, wherein said predetermined solder pattern comprises at least one symbol.

35.   (Previously Presented) The method of claim 33, wherein said substrate comprises a printed circuit board.